PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Bretl, *et al.*

Serial No.: 09/330,769

Filed: June 11, 1999

For: **MPEG ON SCREEN DISPLAY CODER FOR DTV INTERFACES**

Group Art Unit: 2621

Examiner: A. Rao

Attorney Docket: 7081

Confirmation No.: 9810

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail, postage pre-paid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date:

February 28, 2007

Trevor B. Joike
Reg. No. 25,542
Attorney for Applicants

PETITION UNDER 37 CFR 1.181(a)
TO WITHDRAW APPLICATION FROM ABANDONMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REMARKS

On February 23, 2007, the USPTO mailed a Notice of Abandonment indicating that the above captioned application was abandoned for failure to file a timely response to the Office Action mailed August 10, 2006. However, a response to this Office Action was in fact mailed to the USPTO with a Certificate of Mailing dated December 15, 2006. A copy of this response is enclosed. The Certificate of Mailing was signed by the undersigned and shows that the response was placed in

first class mail on that date. This copy also included a petition for an extension of time with a request to charge our client's deposit account for the associated fee.

Also enclosed is a copy of a return card that was mailed with the amendment. However, the return card showing receipt of the response by the USPTO was not received back by applicant. A copy of a log sheet also showing that the response was mailed on December 15, 2006 is further enclosed. Finally, a transmittal letter to our client dated December 15, 2006 indicates that we forward the enclosed response to the USPTO.

In view of the above, please grant this Petition.

If any fees, including the fee for the extension of time requested in the accompanying copy of the response mailed December 15, 2006 fee, are required in connection with this Petition, please charge Deposit Account 26 0175. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

SCHIFF HARDIN LLP
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606-6402
(312) 258-5774
CUSTOMER NO. 28574

By: _____
Trevor B. Joike
Reg. No: 25,542

February 28, 2007

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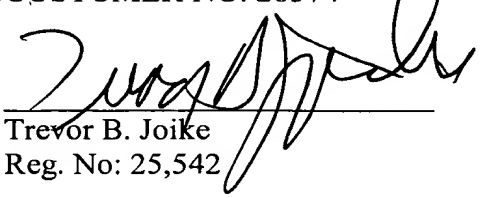
By: 

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February 28, 2007

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SCHIFF HARDIN LLP
PATENT DEPARTMENT
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In re application of: Wayne E. Bretl — CONFIRMATION NO.: 9810

Serial No.: 09/330,769 — GROUP ART UNIT: 2621

Filed: June 11, 1999 — EXAMINER: A. Rao

For: **MPEG ON SCREEN DISPLAY CODER FOR DTV INTERFACES**

RESPONSE TO 08/10/06 OFFICE ACTION

MAIL STOP Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
SIR:

Transmitted herewith is an amendment in the above-identified application.

☐ No additional fee is required.

The fee has been calculated as shown below.

CLAIMS AS AMENDED						
	(2) CLAIMS REMAINING AFTER AMENDMENT		(4) HIGHEST NO. PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	(6) RATE	(7) ADDITIONAL FEE
TOTAL CLAIMS	*47	MINUS	88	0	( ) X 25.00 ( ) X 50.00	$.00
INDEP. CLAIMS	* 2	MINUS	5	X0	( ) X 100.00 ( ) X 200.00	$.00
Application amended to contain any multiple dependent claims not previously paid for.				(*) YES ( ) NO	( ) $180.00 ( ) $360.00 ONE TIME	
			TOTAL ADDITIONAL FEE FOR THIS AMENDMENT		$.00	

* If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20 write "20" in this space.

■ Applicants petition the Commissioner of Patents and Trademarks to extend this time for response to the Office Action dated 08/10/06 for 2 months so that the period for response is extended to 1/10/06. A check in the amount of $___ is attached to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to deposit account No. 26 0175. A duplicate copy of this sheet is enclosed.

☐ A check in the amount of $ _____ is attached.

☐ A check for $ _____ accompanying IDS under 37 CFR 1.97(c) is attached

☐ A check for $ _____ and Petition for Consideration of IDS under 37 CFR 1.97(d) is attached.

■ The Commissioner is hereby authorized to charge **Deposit Account No. 26 0175** the amount of **$450** (2 month extension fee)and any additional fees which may be required, or to credit any overpayment. A duplicate of this sheet is enclosed.

■ When phoning re this application, please call (312) 258-5774.

SCHIFF HARDIN LLP (Customer Number: 28574)
Patent Department

BY _____ (25,542)

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 15, 2006.

Trevor B. Joike
NAME OF APPLICANT'S ATTORNEY

SIGNATURE

December 15, 2006
DATE

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	I hereby certify that this paper is being deposited with the United States Postal Service as first class mail, postage pre-paid, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date:
Bretl, *et al.*	
Serial No.: 09/330,769	
Filed: June 11, 1999	
For: **MPEG ON SCREEN DISPLAY CODER FOR DTV INTERFACES**	
Group Art Unit: 2621	December 15, 2006
Examiner: A. Rao	
Attorney Docket: 7081	
Confirmation No.: 9810	Trevor B. Joike Reg. No. 25,542 Attorney for Applicants

RESPONSE TO 08/10/06 OFFICE ACTION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INTRODUCTION

Claims 62-84 and 88-111 are now in the application. Old claims 1, 11, 16, 17, 28, 29, 32, 37, 42, 46, 47, 56, 57, 59-62, 64, 70, 74, 75, and 81-88 are rejected. Old claims 18, 19, 30, 31, 39, 58, 66, and 76 are indicated as being allowable if written in independent form.

IN THE CLAIMS

1-61. (canceled)

62. (original) An MPEG on-screen display coder comprising:

a buffer arranged to receive and buffer an MPEG transport data stream containing frames of a selected program and frames of a non-selected program;

an MPEG encoder arranged to encode frames of the selected program with an on-screen display; and,

a multiplexer arranged to selectively pass to a digital television receiver the frames of the non-selected program, the encoded frames of the selected program, and original frames of the selected program.

63. (original) The MPEG on-screen display coder of claim 62 wherein the encoded frames have a time base which is independent of the original frames of the selected program.

64. (original) The MPEG on-screen display coder of claim 62 wherein the encoded frames have a time base which is slaved to the original frames of the selected program.

65. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to calculate a video hold off time dependent upon a number of frames in a decoder buffer of the digital television receiver and to use the video hold off time so as to prevent overflow of the decoder buffer.

66. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to supply I frame markers, and wherein the multiplexer is controlled in response to the I frame markers so as to begin supplying encoded frames to the digital television receiver with one I frame and to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

67. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to supply a video I frame marker and an on-screen display I frame marker, wherein the multiplexer is controlled in response to the on-screen display I frame marker so as to begin supplying encoded frames to the digital television receiver with one I frame, and wherein the multiplexer is

controlled in response to the video I frame marker so as to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

68. (original) The MPEG on-screen display coder of claim 67 wherein the MPEG encoder supplies the on-screen display I frame marker when the MPEG encoder generates an encoded I frame, and wherein the MPEG encoder signals the video I frame marker when an original I frame of the selected program is received.

69. (original) The MPEG on-screen display coder of claim 62 wherein the on-screen display is overlaid on a solid color background.

70. (original) The MPEG on-screen display coder of claim 62 wherein the on-screen display is overlaid on video.

71. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to pass unchanged I frames.

72. (original) The MPEG on-screen display coder of claim 71 wherein the MPEG encoder is arranged to encode a first P frame by predicting the first P frame from a preceding I frame with residuals in the predicted first P frame containing the on-screen display and with motion vectors set equal to zero, and wherein the MPEG encoder is arranged to encode subsequent P frames based upon the predicted first P frame with residuals and motion vectors set equal to zero.

73. (original) The MPEG on-screen display coder of claim 72 wherein the MPEG encoder is arranged to supply first and second I frame markers, wherein the multiplexer is controlled in response to the first I frame marker so as to begin supplying the encoded frames to the digital television receiver with one I frame, and wherein the multiplexer is controlled in response to the second I frame marker so as to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

74. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to encode I frames with the on-screen display.

75. (original) The MPEG on-screen display coder of claim 74 wherein the MPEG encoder is arranged to encode subsequent P frames by prediction based upon the encoded I frames with residuals and motion vectors set equal to zero.

76. (original) The MPEG on-screen display coder of claim 75 wherein the MPEG encoder is arranged to supply first and second I frame markers, wherein the multiplexer is controlled in response to the first I frame marker so as to begin supplying the encoded frames to the digital television receiver with one I frame, and wherein the multiplexer is controlled in response to the second I frame marker so as to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

77. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to generate an I frame having a solid color background and an on-screen display, and wherein the MPEG encoder generates a P frame predicted from the I frame with zero residual.

78. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to encode frames with the on-screen display by prediction with non-zero motion vectors in order to encode animated graphics.

79. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to pass a first I frame without modification, to predict subsequent P frames based upon the first I frame, to overlay the on-screen display on a second I frame, and to predict subsequent P frames based upon the second I frame.

80. (original) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to encode frames by mixing original video of the selected program in a window of reduced size with the on-screen display.

81. (original) The MPEG on-screen display coder of claim 62 wherein the multiplexer is arranged to add make-up packets to each encoded frame as necessary to

ensure that each encoded frame has as many transport packets as an original frame of the selected program.

82. (original) The MPEG on-screen display coder of claim 81 wherein the make-up packets are null packets.

83. (original) The MPEG on-screen display coder of claim 81 wherein the make-up packets are Program Map Table packets.

84. (previously presented) The MPEG on-screen display coder of claim 62 wherein the buffer comprises a delay buffer arranged to delay the MPEG transport data stream by an amount of time commensurate with an amount of time required by the MPEG encoder to encode the frames of the selected program with an on-screen display.

85-87. (canceled)

88. (previously presented) An MPEG on-screen display coder comprising:

a demultiplexer arranged to demultiplex frames of a selected video program from frames of a non-selected program in a transport stream;

an MPEG encoder arranged to receive the frames of the selected program and to process the frames of the selected program so as to encode frames with an on-screen display; and,

a multiplexer arranged to multiplex the encoded frames with the frames of the non-selected video program in the transport stream.

89. (new) The MPEG on-screen display coder of claim 88 wherein the encoded frames have a time base which is independent of the original frames of the selected program.

90. (new) The MPEG on-screen display coder of claim 88 wherein the encoded frames have a time base which is slaved to the original frames of the selected program.

91. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to calculate a video hold off time dependent upon a number of frames in a decoder buffer of the digital television receiver and to use the video hold off time so as to prevent overflow of the decoder buffer.

92. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to supply I frame markers, and wherein the multiplexer is controlled in response to the I frame markers so as to begin supplying encoded frames to the digital television receiver with one I frame and to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

93. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to supply a video I frame marker and an on-screen display I frame marker, wherein the multiplexer is controlled in response to the on-screen display I frame marker so as to begin supplying encoded frames to the digital television receiver with one I frame, and wherein the multiplexer is controlled in response to the video I frame marker so as

to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

94. (new) The MPEG on-screen display coder of claim 93 wherein the MPEG encoder supplies the on-screen display I frame marker when the MPEG encoder generates an encoded I frame, and wherein the MPEG encoder signals the video I frame marker when an original I frame of the selected program is received.

95. (new) The MPEG on-screen display coder of claim 88 wherein the on-screen display is overlaid on a solid color background.

96. (new) The MPEG on-screen display coder of claim 88 wherein the on-screen display is overlaid on video.

97. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to pass unchanged I frames.

98. (new) The MPEG on-screen display coder of claim 97 wherein the MPEG encoder is arranged to encode a first P frame by predicting the first P frame from a preceding I frame with residuals in the predicted first P frame containing the on-screen display and with motion vectors set equal to zero, and wherein the MPEG encoder is arranged to encode subsequent P frames based upon the predicted first P frame with residuals and motion vectors set equal to zero.

99. (new) The MPEG on-screen display coder of claim 98 wherein the MPEG encoder is arranged to supply first and second I frame markers, wherein the multiplexer is controlled in response to the first I frame marker so as to begin supplying the encoded frames to the digital television receiver with one I frame, and wherein the multiplexer is controlled in response to the second I frame marker so as to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

100. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to encode I frames with the on-screen display.

101. (new) The MPEG on-screen display coder of claim 100 wherein the MPEG encoder is arranged to encode subsequent P frames by prediction based upon the encoded I frames with residuals and motion vectors set equal to zero.

102. (new) The MPEG on-screen display coder of claim 101 wherein the MPEG encoder is arranged to supply first and second I frame markers, wherein the multiplexer is controlled in response to the first I frame marker so as to begin supplying the encoded frames to the digital television receiver with one I frame, and wherein the multiplexer is controlled in response to the second I frame marker so as to resume supplying the original frames of the selected program to the digital television receiver with another I frame.

103. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to generate an I frame having a solid color background and an on-screen display, and wherein the MPEG encoder generates a P frame predicted from the I frame with zero residual.

104. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to encode frames with the on-screen display by prediction with non-zero motion vectors in order to encode animated graphics.

105. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to pass a first I frame without modification, to predict subsequent P frames based upon the first I frame, to overlay the on-screen display on a second I frame, and to predict subsequent P frames based upon the second I frame.

106. (new) The MPEG on-screen display coder of claim 88 wherein the MPEG encoder is arranged to encode frames by mixing original video of the selected program in a window of reduced size with the on-screen display.

107. (new) The MPEG on-screen display coder of claim 88 wherein the multiplexer is arranged to add make-up packets to each encoded frame as necessary to

ensure that each encoded frame has as many transport packets as an original frame of the selected program.

108. (new) The MPEG on-screen display coder of claim 107 wherein the make-up packets are null packets.

109. (new) The MPEG on-screen display coder of claim 107 wherein the make-up packets are Program Map Table packets.

110. (new) The MPEG on-screen display coder of claim 88 further comprising a buffer, wherein the buffer is arranged to receive and buffer the transport stream, and wherein the buffer is arranged to delay the transport stream by an amount of time commensurate with an amount of time required by the MPEG encoder to encode the frames of the selected program with the on-screen display.

111. (new) The MPEG on-screen display coder of claim 62 wherein the MPEG encoder is arranged to encode frames of only the selected program with the on-screen display.

REMARKS

In section 6 of the Office Action, the Examiner rejected independent claims 62 and 88 under 35 U.S.C. §103(a) as being unpatentable over Schumann in view of Chen.

Schumann shows in Figure 1 an on-screen display system 100 having an OSD subsystem 102 and a video display controller 108. The OSD subsystem 102 creates pixel-based graphics. An MPEG-2 decoder 104 decodes compressed MPEG-2 data as images for viewing on a display 110, and a converter 106 converts these images into bit representations. The video display controller 108 creates the proper video signals, timing of image display, and overlay of bit mapped data over the MPEG-2 images, and sends the output signal to the display 110.

As shown in Figure 2, a DVD player 202 receives an MPEG-2 coded audio/video stream, applications, and data from a DVD, and displays still images and full motion video on a television screen or monitor 206. The DVD player 202 also receives user commands from a remote control 208. These commands may be selected by a user from menu items displayed on screen via MPEG-2 graphics. Figure 3 shows an example menu.

Figure 4 shows a set top box that processes and decodes compressed MPEG video image data. The set top box has an input port 402 for receiving data from a DVD disc 204, an input port 404 for receiving control inputs from the remote control 208, and an output port 406 for supplying an audio/video output signal, fully MPEG-2 decoded, to the television 206. The data from the DVD disc 204 is supplied from the input port 402 to an application 408. DVD video data is supplied by a de-multiplexer 410 to an MPEG-2 decoder 412, and associated audio is supplied by the de-multiplexer 410 to an audio decoder 410. The outputs of audio and MPEG-2 decoders 410 and 412 supply the audio/video output 406.

Control inputs at the input port 404 are also supplied to the application 408.

The application 408 communicates with an MPEG-2 graphics sub-system 414 that includes a memory for storing graphics images, encoded in MPEG-2 macroblocks, representing buttons, fixed text, and font characters. Also stored in the memory of the MPEG-2 graphics sub-system 414 is a list of font macroblocks representing individual letters that can be accessed by operation of the remote control 208. Base graphic images are stored in an I-frame list.

Initially, an I-frame, representing background, is sent by the MPEG-2 sub-system 414 through the demultiplexer 416 to the MPEG-2 decoder 412. In response to a control input from the remote control 208, the application sub-system 408, for example, may be instructed to "press" a button. The MPEG-2 sub-system 414 builds a P-frame using pre-compressed macroblocks to present a visual display of the button actually being pressed on the screen. The output frame is sent to the MPEG-2 decoder 412 for decoding and then to the television 206 by way of the output port 406. The graphics element is added to the background image either by image replacement or image overlay.

Thus, an I-frame is initially selected from the I-frame list. Then, the application 408 selects an appropriate MPEG-2 graphic element (in the form of a group of adjacent fully encoded macroblocks) from the P-frame list and/or the P-frame font depending upon an input from the remote control 208. Finally, the background data in the selected I-frame is replaced or overlaid with the selected MPEG-2 graphic element, and the modified image frame is passed to the MPEG-2 decoder for display.

Independent claim 62 is directed to an MPEG on-screen display coder having a buffer, and MPEG encoder, and a multiplexer. The buffer receives and buffers an MPEG transport data stream containing frames of a selected program and frames of a non-selected program. The MPEG encoder encodes frames of the selected program with an on-screen display. The multiplexer selectively passes to a digital television receiver the frames of the non-selected program, the encoded frames of the selected program, and original frames of the selected program.

Schumann does not disclose the buffer of independent claim 62 because Schumann does not disclose buffering a transport stream containing both a selected program and a non-selected program. Indeed, the MPEG-2 graphics sub-system 414 of Schumann receives only a selected program (i.e., the program from the DVD disc 204) and, therefore, cannot buffer both the selected program and a non-selected program.

The Examiner argues that Schumann inherently discloses a buffer. However, even if that were true, such a buffer would not, and could not, buffer a transport stream containing both a selected program and a non-selected program because no non-selected program is received from the DVD disc 204.

Chen discloses two input streams that are received by a digital ad insertion module 300, a main stream that contains a network television program, and an insertion stream that contains an ad to be inserted into the main stream. As shown in Figure 4, a buffer 480 buffers the main stream, a buffer 490 buffers the insertion stream, and a buffer 485 combines the main stream and the insertion stream (and null packets, if needed).

As can be seen, Chen does not disclose a buffer that buffers a transport stream that contains both a selected program and a non-selected program.

Accordingly, even if Schumann and Chen could be combined, one of ordinary skill in the art would not combine them so as to meet the buffer limitation of independent claim 62.

Therefore, for this reason, independent claim 62 is not unpatentable over Schumann in view of Chen.

Moreover, Schumann does not disclose a multiplexer that selectively passes the frames of a non-selected program, the encoded frames of a selected program, and the original frames of the selected program. Indeed, Schumann does not disclose a non-selected program and, therefore, cannot disclose or suggest multiplexing

the selected processed with the on-screen display with a non-selected program.

Chen likewise does not disclose a multiplexer that selectively passes the frames of non-selected and selected programs. Indeed, as in the case of Schumann, Chen does not disclose a non-selected program and, therefore, cannot disclose or suggest multiplexing selected and non-selected programs.

Accordingly, even if Schumann and Chen could be combined, one of ordinary skill in the art would not combine them so as to meet the multiplexer limitation of independent claim 62.

Therefore, for this reason also, independent claim 62 is not unpatentable over Schumann in view of Chen.

Furthermore, Schumann and Chen, whether taken alone or in combination, simply do not deal with the invention of independent claim 62. Neither reference discloses buffering a transport stream containing a selected program and a non-selected program, encoding the selected program with an on-screen display, and then multiplexing the non-selected program and the encoded selected program.

Accordingly, even if Schumann and Chen could be combined, one of ordinary skill in the art would not combine them so as to meet the invention of independent claim 62.

Therefore, for this further reason, independent claim 62 is not unpatentable over Schumann in view of Chen.

Independent claim 88 is directed to an MPEG on-screen display coder having a demultiplexer, an MPEG encoder, and a multiplexer. The demultiplexer demultiplexes frames of a selected video program from frames of a non-selected program in a transport stream. The MPEG encoder receives the frames of the selected program and processes these so as to encode frames with an on-screen display. The multiplexer multiplexes the encoded frames with the frames of the non-selected video program in the transport stream.

Schumann does not disclose the demultiplexer of independent claim 62 because Schumann does not disclose a transport stream containing a selected program and a non-selected program and, therefore, cannot demultiplex a selected program from a non-selected program. Indeed, the MPEG-2 graphics sub-system 414 of Schumann receives

only a selected program (i.e., the program from the DVD disc 204).

The Examiner recognizes that Schumann fails to disclose a demultiplexer. Therefore, the Examiner points to Chen and particularly column 9, lines 25-65 of Chen.

Column 9, lines 25-65 of Chen describes a processor 470 that processes the last packet before the splicing point and the first packet after the splicing point so as to provide a seamless transition that is MPEG compliant. Accordingly, at the beginning point of insertion, the processor 470 reads the last transport packet from the main stream before this point and the first packet from the insertion stream after this point, and repairs the syntax of these packets, if necessary, so that they are MPEG compliant. At the end point of insertion, the processor 470 reads the last transport packet from the insertion stream before this point and the first packet from the main stream after this point, and repairs the syntax of these packets, if necessary, so that they are MPEG compliant.

This portion of Chen then states that, in the event of a potential buffer overflow, a null packet generator inserts null packets into the output. A PSI/PID replacer 435 is provided to replace the PSI

tables and PIDs of the inserted stream with those of the main stream. As described above, the buffers 480 and 490 buffer the main and insertion streams, respectively. The buffer 485 buffers common data such as PSI and null packets.

As can be seen, there is no demultiplexing described in this portion of Chen cited by the Examiner or in any other portion of Chen, and there is no demultiplexing a selected program from a non-selected program disclosed in Chen. Indeed, there is no non-selected program in Chen. (Both the program in the main stream and the ad in the insertion stream are selected programs because both are "encoded.")

Accordingly, even if Schumann and Chen could be combined, one of ordinary skill in the art would not combine them so as to meet the demultiplexer limitation of independent claim 88.

Therefore, for this reason, independent claim 88 is not unpatentable over Schumann in view of Chen.

Moreover, Schumann does not disclose a multiplexer that multiplexes the encoded frames with the frames of the non-selected video program in the transport stream. Indeed, Schumann does not disclose a non-selected program and, therefore, cannot disclose or

suggest multiplexing the encoded selected program with a non-selected program.

Chen likewise does not disclose a multiplexer that multiplexing an encoded selected program with a non-selected program. Indeed, as in the case of Schumann, Chen does not disclose a non-selected program and, therefore, cannot disclose or suggest multiplexing selected and non-selected programs.

Accordingly, even if Schumann and Chen could be combined, one of ordinary skill in the art would not combine them so as to meet the multiplexer limitation of independent claim 88.

Therefore, for this reason also, independent claim 88 is not unpatentable over Schumann in view of Chen.

Furthermore, Schumann and Chen, whether taken alone or in combination, simply do not deal with the invention of independent claim 88. Neither reference discloses demultiplexing a transport stream containing a selected program and a non-selected program, encoding the selected program with an on-screen display, and then multiplexing the non-selected program and the encoded selected program.

Accordingly, even if Schumann and Chen could be combined, one of ordinary skill in the art would not combine them so as to meet the invention of independent claim 88.

Therefore, for this further reason, independent claim 88 is not unpatentable over Schumann in view of Chen.

Because independent claims 62 and 88 are not unpatentable over Schumann in view of Chen, dependent claims 63-84 and 89-111 are not unpatentable over Schumann in view of Chen.

CONCLUSION

In view of the above, it is clear that the claims of the present application are patentable over the references applied by the Examiner. Accordingly, allowance of these claims and issuance of the above captioned patent application are respectfully requested.

Respectfully submitted,

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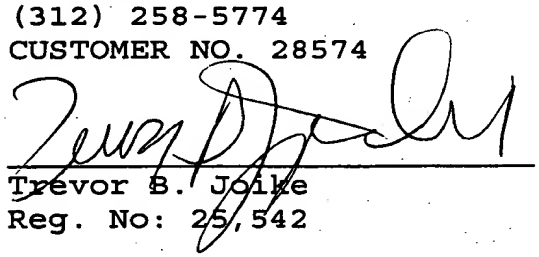
By: 

Trevor B. Joike
Reg. No: 25,542

December 15, 2006

WEEK 50

15 DECEMBER FRIDAY

WEEK 50

349th Day - 16 Days Remaining

HANUKKAH BEGINS AT SUNDOWN

C	Baker	IDS	11/504,305	MB
C	Scholz	Decl.	10/336,456	SHN
C	Holmstrom	Amend A	10/875,130	SHN
C	Butler	Response	09/330,769	TBJ
C	Klein	Amend B	11/125,746	MAR

HON. COMMISSIONER OF PATENTS & TRADEMARKS
P.O. BOX 1450
ALEXANDRIA, VIRGINIA 22313-1450

SIR:

PLEASE APPLY A RECEIPT STAMP HERETO AND MAIL TO ACKNOWLEDGE RECEIPT OF THE ATTACHED:

Wayne E. Bretl	Response to 08/10/06 Office action (27 pgs.) & Amend. Cover Sheet in dupl.
APPLICANT	TYPE OF DOCUMENT(S)

December 15, 2006	09/330,769	P01,0481
MAILING DATE		REFERENCE NUMBER

Due 1/10
T. Joike

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December 15, 2006

Attn: Jack Kail, Esq.
Chief Patent Counsel
Patent Department
Zenith Electronics Corporation
2000 Millbrook Drive
Lincolnshire, Illinois 60069

Re: Your Ref. No. 7081, Bretl patent application, Our Case No. P01,0481, Client/Matter No. 22625-0052; and

Your Ref. No. 7165, Citta et al. patent application, Our Case No. P01,0500, Client/Matter No. 22625-0042

Dear Jack:

Enclosed please find a copy of the Response we forwarded to the Patent Office for each of the above-identified patent application.

Sincerely,

Trevor B. Joike

Trevor B. Joike edR

TBJ:edr
Enclosure
CH1\ 4790945.1